Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. **Application Number** 10/092,944 Filing Date 3/5/2002 TRANSMITTAL First Named Inventor Todor J. Fay **FORM** Group Art Unit 2837 (to be used for all correspondence after initial filing) **Examiner Name MARLON T FLETCHER** Attorney Docket Number MS1-783US Total Number of Pages in This Submission **ENCLOSURES** (check all that apply) X Fee Transmittal Form Drawing(s) After Allowance Communication to Group Fee Attached Licensing-related Papers Appeal Communication to Board Petition of Appeals and Interferences Amendment / Reply Petition to Convert to a Appeal Communication to Group After Final Provisional Application (Appeal Notice, Brief, Reply Brief) Affidavits/declaration(s) Power of Attorney, Revocation Proprietary Information Change of Correspondence **Extension of Time Request** Status Letter Address **Express Abandonment Request** Other Enclosure(s) (please **Terminal Disclaimer** Information Disclosure Statement identify below): Request for Refund PTO-1449 Form; Cited References (37); Certified Copy of Priority CD, Number of CD(s) Return Post Card **Documents** Response to Missing Parts/ Incomplete Application Remarks Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm David A. Morasch/Reg. No. 42905 Individual Name Signature Date

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Anna G. Hook	
Signature	Ana a Ale	Date 5-19-05
	7 X 9 11	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date Mo

PTO/SB/17 (12-04)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction	on ACI OI 1995	no bersons are reou	irea to re	SDONG TO A COLLECTIO	n or inten	mation unless	it displays a v	alio OMB com	roi number
Effect Fees pursuant to the Consolid	ive on 12/08/20		4818)			Complete			
				Application Nun	nber	10/092,94	14		
FEE TR			\L	Filing Date		3/5/2002			
Foi	r FY 20	005		First Named Inv	entor/	Todor J.	Fay		
Applicant claims small	entity status	See 37 CED 1 2	7	Examiner Name	•	MARLON	T FLETCH	IER	
	<u> </u>			Art Unit		2837			
TOTAL AMOUNT OF PAY	MENT (\$)	180.00		Attorney Docke	t No.	MS1	-783US		
METHOD OF PAYMEN	「(check all	that apply)					-		
Check Credit (Card N	Money Order	Non	e Other (please id	entify):	. <u>-</u>		
Deposit Account D		•	69	Deposit A			& Hayes, F	PLLC	
For the above-identi				•			oly)		
Charge fee(s)					•		elow, except	t for the filir	ng fee
Charge any a under 37 CFF		(s) or underpayme	nts of fe	e(s) Credi	t any ov	erpayments			
WARNING: Information on this information and authorization	form may be	come public. Credit	t card inf	ormation should n	ot be inc	luded on thi	s form. Provid	ie credit card	!
FEE CALCULATION									
1. BASIC FILING, SEAF									
	FILING F	FEES mall Entity	SEAR	CH FEES Small Entity	EXA	VINATION Small			
Application Type	Fee (\$)	Fee (\$)	Fee (\$		Fee			Fees Paid	(\$)
Utility	300	150	500	250	20	0 10)		
Design	200	100	100	50	130	0 6:	5		
Plant	200	100	300	150	16	0 80) .		
Reissue	300	150	500	250	60	0 30) .		
Provisional	200	100	0	0	(0 () .		
2. EXCESS CLAIM FEE Fee Description Each claim over 20 or, for		each claim over	r 20 and	l more than in t	he oria	inal natent			nall Entity Fee (\$) 25
Each independent claim									100
Multiple dependent clain		,,	P				5 F	360	180
	Extra Claims		Fee	Paid (\$)			ent Claims		
- 20 or HP = _ HP = highest number of total of	claims paid for	x 50 if greater than 20	=		<u>Fe</u>	ө (\$)	Fee Paid	(\$)	
Indep. Claims	Extra Claims	Fee (\$)	Fee I	Paid (\$)					
3 or HP = _ HP = highest number of indep	endent claims	x 200 paid for, if greater tha	= an 3						
3. APPLICATION SIZE									
If the specification and	drawings e							25 for smal	l entity)
for each additional								F 5	a.i.d (#)
<u>Total Sheets</u> 100 =	Extra Shee	/ 50 =	r ot eac	<u>h additional 50 c</u> _ (round up to a v			Fee (\$)	= <u>Fee P</u>	aid (\$)
4. OTHER FEE(S) Non-English Specific	cation ¢1	30 fee (no small	l antitu	discount)				Fees	Paid (\$)
Other: Information D			citity	uiscouiit)				100.00	
Omer: mornation b	.55,000010 01							180.00	
SUBMITTED BY	7.4								
Signature 😽 📈	E NOM	sul		Registration No. (Attorney/Agent)	42905	5	Telephone (509) 324-9	256

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Name (Print/Type) David A. Morasch



3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No.	10/092,944
Filing Date	3/5/2002
Confirmation No.	
Inventorship	
Applicant	Microsoft Corporation
Group Art Unit	
Examiner	
Attorney's Docket No.	MS1-783US
Title: Audio Wave Data Playback in an Audio Generatio	n System
INFORMATION DISCLOSURE STAT	<u>EMENT</u>

.

References -- See Attached Form PTO-1449

To: Commissioner for Patents PO Box 1450

Alexandria, VA 22313-1450

From: David A. Morasch (Tel. 509-324-9256; Fax 509-323-8979)

Lee & Hayes, PLLC

421 W. Riverside Avenue, Suite 500

Spokane, WA 99201

The attached form PTO-1449 is submitted in compliance with Applicant's duty of disclosure under 37 CFR §1.56. The Examiner is requested to make these citations of official record in this application.

The Commissioner is hereby authorized to charge payment of fees or credit overpayments to Deposit Account No. 12-0769 as set forth in 37 CFR §1.17(p).

Dated: May 18, 2005

David A. Morasch Reg. No. 42905

5/24/2005 FMETEKI1 00000100 120769 10092944

24 01 FC:1806 180.00 DA

25

LEE & HAYES, PLLC

1

0510050938 DASFORM

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Cor	mplete if Known	
Application Number	10/092,944	
Filing Date	3/5/2002	
First Named Inventor	Todor J. Fay	
Art Unit	2837	
Examiner Name	MARLON T FLETCHER	
Attorney Docket Number	MS1 -783US	

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2 (d known)}	4/40/4004	Adivoles	134.557 / / / / / / / / / / / / / / / / / /
	ļ	^{US-} 5303218	4/12/1994	Miyake	
		^{US-} 5511002	4/23/1996	Milne et al	
		^{US-} 5548759	8/20/1996	Lipe	
		^{US-} 5717154	2/10/1998	Gulick	
		^{US-} 5734119	3/31/1998	France et al	
		^{US-} 5761684	6/2/1998	Gibson	
		^{US-} 5842014	11/24/1998	Brooks et al.	
		^{US-} 5852251	12/22/1998	Su et al.	
		^{US-} 5890017	3/30/1999	Tulkoff et al.	
		^{US-} 5902947	5/11/1999	Burton et al.	
		^{US-} 5942707	8/24/1999	Tamura	
		^{US-} 5977471	11/2/1999	Rosenzweig	•
		^{US-} 6100461	8/8/2000	Hewitt	
		US- 6152856	11/28/2000	Studor et al.	
		US- 6173317 ,	1/9/2001	Chaddha et al	
		^{US-} 6175070	1/16/2001	Naples et al.	
		^{US-} 6216149	4/10/2001	Conner et al	
		^{US-} 6357039 .	3/12/2002	Kuper	
		^{US-} 6658309	12/2/2003	Abrams et al.	

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	י
						Ļ
						┡
						╄
						╁
						┢

Examiner	Date	
Signature	Considered	
. •		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

S AN ESMAN	te for form 1449/PTO	uction A	ar or 1999, the persons ar	e required to respond to a contection	of information unless it contains a valid OMB control number. Complete if Known
374123 distilu	te 101 101111 1443/F 10			Application Number	10/092,944
INF	ORMATION	DIS	CLOSURE	Filing Date	3/5/2002
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	Todor J. Fay
İ	(1100 00			Art Unit	2837
	(Use as many she	eis as n	ecessary)	Examiner Name	MARLON T FLETCHER
Sheet	2	of	3	Attorney Docket Number	MS1 -783US

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		A. CAMURRI et al., "A Software Architecture for Sound and Music Processing", Microprocessing and Microprogramming " Vol. 35 pp. 625-632 (Sept 1992)	:
		BERRY M., "An Introduction to GrainWave" Computer Music Journal Spring 1999 Vol. 23 No. 1 pages 57-61	
		H. MEEKS, "Sound Forge Version 4.0b", Social Science Computer Review Vol. 16, No. 2, pp. 205-211 (Summer 1998)	
		HARRIS et al.; "The Application of Embedded Transputers in a Professional Digital Audio Mixing System"; IEEE Colloquium on "Transputer Applications"; Digest No. 129, 2/ 1-3 (uk 13 Nov. 1989)	
		J. PICHE et al., "Cecilia: A Production Interface to Csound", Computer Music Journal Vol. 22, No. 2 pp. 52-55 (Summer 1998)	
		M. COHEN et al., "Multidimensional Audio Window Management", Int. J. Man-Machine Studies Vol. 34, No. 3 pp. 319-336 (1991)	
		MALHAM et al., "3-D Sound Spatialization using Ambisonic Techniques" Computer Music Journal Winter 1995 Vol. 19 No. 4 pages 58-70	
		MEYER D., "Signal Processing Architecture for Loudspeaker Array Directivity Control" ICASSP March 1985 Vol. 2 pages 16.7.1-16.7.4	
		MILLER et al., "Audio-Enhanced Computer Assisted Learning and Computer Controlled Audio-Instruction". Computer Education, Pergamon Press Ltd., 1983, Vol. 7 pages 33-54	
		MOORER, JAMES; "The Lucasfilm Audio Signal Processor"; Computer Music Journal, Vol. 6, No. 3, Fall 1982, 0148-9267/82/030022-11; pages 22 through 32	

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-03) Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitu	te for form 1449/PTO		· · · · · · · · · · · · · · · · · · ·		Complete	if Known	
Gabana	10 10 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Application Number	10/092,94	14	
INF	ORMATION	DIS	CLOSURE	Filing Date	3/5/2002		
STA	TEMENT B	SY A	PPLICANT	First Named Inventor	Todor J. F	ay	
	(1100 00 00000 0000			Art Unit	2837		
	(Use as many she	ets as n	ecessary)	Examiner Name	MARLON	T FLETCHER	
Sheet	3	of	3	Attorney Docket Number	MS1	-783US	

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Examiner Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		R. DANNENBERG et al., "Real-Time Software Synthesis on Superscalar Architectures", Computer Music Journal Vol. 21, No. 3 pp. 83-94 (Fall 1997)	
-		R. NIEBERLE et al., "CAMP: Computer-Aided Music Processing", Computer Music Journal Vol. 15, No. 2, pp 33-40 (Summer 1991)	
		REILLY et al., "Interactive DSP Debugging in the Multi-Processor Huron Environment" ISSPA Aug. 1996 pages 270-273.	
		STANOJEVIC et al., "The Total Surround Sound (TSS) Processor" SMPTE Journal Nov. 1994 Vol.3 No. 11 pages 734-740	
		V. ULIANICH, "Project FORMUS: Sonoric Space-Time and the Artistic Synthesis of Sound", Leonardo Vol. 28, No. 1 pp. 63-66 (1995)	
		VERCOE, BARRY; "New Dimensions in Computer Music"; Trends & Perspectives in Signal Processing; Focus, April 1982; pages 15 through 23	
		VERCOE, et al; "Real-Time CSOUND: Software Synthesis with Sensing and Control"; ICMC Glasgow 1990 for the Computer Music Association; pages 209 through 211	
		WIPPLER, JEAN-CLAUDE; "Scripted Documents"; Proceedings of the 7th USENIX TcI/TKConference; Austin Texas; February 14-18, 2000; The USENIX Association	
	-		

Examiner	Date	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete his form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.